

## Electrical code issues and answers.

### ● **Telecommunications Bill Passed and Will Soon be Implemented.**

The Telecommunications Bill was signed on March 30<sup>th</sup> and goes into effect June 8<sup>th</sup>, 2000. Under this bill, telecommunications contractors must be registered, insured and bonded. Certification will also be required for administrators, but certification is not required for telecommunications installers. Inspections will be required for all Telecommunications installations that have over ten outlets, penetrate fire barriers, pass through hazardous locations, or those installations which include a riser backbone. Electrical contractors may perform telecommunications work in their area of specialty.

- Contractors can become licensed beginning May1, 2000 with an effective date of June 8<sup>th</sup>.
- Administrators may be grandfathered without testing by telecommunications companies who have been in business 2 years prior to July 1, 2000.
- Contractor licensing, permits, and inspection will be required after the effective date.

### ● **WAC 296 Rule Revisions**

WAC 296-46 and 401A rules are being opened for revision. Stakeholders and interested parties are urged to give input. Those interested are invited to call the Chief Electrical Inspector's office at (360) 902-5249 to give notification of your interest so that we may schedule stakeholder meetings to facilitate the process. This is your opportunity to contribute. You are encouraged to participate in this process!

### ● **Stakeholders Meetings in Eastern Washington.**

The following Stakeholders meetings have been scheduled to help all attendees better plan their busy schedules and agendas. This is your chance for input. You can also receive 4 CEU credits for both attending the meeting and satisfactorily completing the take home exam (with a score of 70%) which will be available at the meeting. A maximum of 4 CEU's will be awarded in each fiscal year (July1 to June 30). Meetings now scheduled are:

Okanogan	Wenatchee	Moses Lake
6:00 – 9 PM	6:00 – 9 PM	6:00 – 9 PM
April 17	April 18	April 19
Okanogan County PUD Auditorium	Douglas County PUD Auditorium	3001 W Broadway Ave. Moses Lake L&I conference Rm

### ● **Does Bidding Electrical Jobs Require an Electrical Contractors License?**

RCW 19.28.120 states it is unlawful for any person, firm, partnership, corporation, or other entity to engage in, conduct, or carry on **the business of installing or maintaining wires or equipment to convey electric current.** WAC 296-46-920 (1) states that offering to perform, submitting a bid for, installing or maintaining conductors or equipment that convey or utilize electrical current is liable for a civil penalty. Bidding and offering to do **work** is considered to be integral to "being in the business" as an electrical contractor. Unlicensed persons or firms bidding or offering to do electrical work are illegally acting as an electrical contractor and may be issued citations.

### ● **Who May Conduct Field Tests On GFP Systems**

Recently, questions have been asked about who is allowed to conduct field-testing of GFP systems. The requirements in NEC 230-95, 215-10, and 517-17 is for service/feeder disconnecting means operating 151 to 600 volts, and rated 1000 amperes or more on solidly grounded wye systems. This test must be performed on site and prior to energizing.

In the past, the department recognized a limited number of testing firms qualified to perform this test. Currently, the department recognizes anyone who has the **capability** of performing the test. The department considers a **capable**

entity as one who possesses the skill, knowledge and equipment required to perform the test. The test must be performed according to manufacture's instructions and a written record of test results must be available to the inspector.

### ● Approval of Class 2 Transformer Loads.

Unlisted Class 2 transformer load components are permitted when all the following items are met:

1. The Class 2 transformer is listed.
2. The wiring method used complies with NEC 725.
3. The secondary voltage of the Class 2 transformer does not exceed 30 volts ac or 42.4 volts peak open circuit voltage.
4. The secondary side of the Class 2 transformer is protected by a 5 ampere maximum fuse or a fuse derived by dividing 100 VA by the secondary voltage whichever is less.
5. The Class 2 circuit does not supply life safety equipment or emergency egress, such as fire alarm or rescue systems.
6. The components and devices must be totally within the secondary of the Class 2 circuit (that is, the device is not in any way electrically connected to any other electric source).
7. A permanent marking located as near as possible to the transformer must indicate the size and type of the replacement fuse.

### ● Can a Condulet or Box be Direct Buried Underground?

NEC 370-29 states that condulets/boxes must be accessible without removing any part of the building or, in underground circuits, without excavation sidewalks, paving, etc. The exception states listed condulets/boxes may be buried if covered by gravel, light aggregate, or non-cohesive granulated soil and effectively identified and accessible for excavation.

### ● Amusement Ride Labels.

Electrical Inspection Field Supervisors will be involved in all pre-season electrical inspections. If the "Ride Compliance Label" has been previously affixed, go to the "Basic Inspection Checklist." If the "Ride Compliance Label" has not been previously affixed, the department will use one of the following methods to determine whether rides and equipment meet a minimum safety standard. The Field Supervisor will determine which procedure is appropriate for the inspection of each individual ride or ride equipment.

1. Inspect the entire ride for compliance with the Edition of the National Electrical Code (NEC) and Washington Administrative Code (WAC) in effect at the time the ride was manufactured or had a major alteration.
2. Inspect the amusement ride control panel(s) to UL 508 when all components are listed or recognized by an electrical testing laboratory approved by the department. Inspect the remainder of the ride for compliance with the Edition of the National Electrical Code (NEC) and Washington Administrative Code (WAC) in effect at the time the ride was manufactured or had a major alteration.
3. Advise the owner obtain a field evaluation performed by an electrical testing laboratory recognized by the department for the control panel(s) when all components are NOT listed or recognized by an approved electrical testing laboratory. The electrical inspector inspects the other wiring on the ride for compliance with the NEC and WAC in effect at the time the ride was manufactured or had a major alteration.
4. Advise the owner to obtain a field investigation from an electrical testing laboratory accredited with the department on the entire ride when components are not listed or recognized by an approved electrical testing laboratory.
5. Each amusement ride or structure will have a metallic "Ride Compliance Label" (yellow label with black lettering) applied to the inside of the control panel enclosure, or other location where the label is protected from damage. This will be done only after the ride or structure has been inspected using one of the four procedures listed above and is found to be in compliance with appropriate safety standards. Maintenance type corrections are not required to be completed before the metal compliance sticker is affixed. The supervisor/lead inspector must approve the application of the ride compliance label. On an individual, case-by-case basis, the department may allow the ride to operate until the "Ride Compliance Label" has been applied.